

Summary of the doctoral thesis,
A Project-Based Approach to Elementary School English Education:
Quantitative and Qualitative Analyses

Atsuko Shirado

The aim of this doctoral thesis was to examine the effects of the Project-Based Approach (the PBA) on EFL elementary school students through quantitative and qualitative analyses on an extended investigation. This research design was chosen because there were few suitable foreign language learning and teaching approaches for students and homeroom teachers (HRTs) of Japanese public elementary schools for English, in spite of the main objective, fostering the foundation of students' communication abilities, which was fixed by the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) (2008) for Foreign Language Activities.

In the Introduction, the outline of the PBA in SLA literature was described. The PBA helps students meaningfully communicate their feelings and ideas in authentic contexts. Moreover, in the process of completing the end-product of a project, the PBA can create opportunities for students to develop their L2 self-confidence, autonomy, and collaborative learning as well as their second language (L2)/foreign language (FL) (Fried-Booth, 1986, 2002). (L2 is intended to mean language learning in a host environment, while FL in a foreign environment.) Based on the theory of the PBA in L2/FL education, empirical research on the PBA has indicated four main characteristics: (1) the appropriate balance between teachers' guidance and students' autonomy (Henry, 1994), (2) purposeful language use (Fried-Booth, 1986, 2002), (3) multi-skill tasks (Haines, 1989; Ribé & Vidal, 1993), and (4) recycling known language (Haines, 1989). By adhering to the theory and characteristics of the PBA, the researcher found in the seminal study that English lessons based on the PBA could help the participating students develop their English abilities including listening and speaking skills and increase their *state L2 self-confidence* (Shirado, 2012). However, this seminal study did not reveal whether or not PBA helped the students increase their *stable L2 self-confidence* since one term (four

months) was not enough to foster their stable L2 self-confidence. Thus, my study examined the longitudinal and cross-sectional effects of the PBA on fifth and sixth graders in a Japanese public elementary school.

Chapter Two examined the theoretical background and framework, the definition, and the characteristics of the PBA. As theoretical background, Dewey, Piaget, Vygotsky, Cummins, MacIntyre and other influential scholars were reviewed. Based on the theoretical foundation of the PBA, the relationships between the PBA and other individual language teaching approaches and methods were investigated to answer the question of why the PBA has the potential to be one of the appropriate approaches to elementary school English education. Moreover, the previous reports on implementation of the PBA for adult and young learners were reviewed to explore how to apply the characteristics of the PBA to individual ESL/EFL classrooms. In addition, the researcher discussed the criticisms of the PBA and the environment of English learning and teaching in Japanese public elementary schools to make the necessity of this study on the PBA clear. Judging from the research on the PBA in ESL/EFL contexts, it was believed that the PBA was useful for both adult and young learners. However, there has been little empirical research on the PBA in Japanese elementary school English education including both linguistic and affective aspects through analysis based on research theories. In spite of paucity of such research on the PBA, in order to analyze the foundation of students' communication abilities, it was believed that there was a need to analyze the data from linguistic and affective aspects.

Hence, based on the knowledge obtained in this chapter, the researcher proposed the four research questions to investigate the effects of the PBA on EFL students over an extended period of time from linguistic and affective aspects by the mixed methods approach. RQ-1: *Does the PBA increase EFL elementary school students' listening abilities in English?* RQ-2: *Does the PBA develop EFL elementary school students' speaking performance in English?* RQ-3: *Does the PBA develop EFL elementary school students' L2 self-confidence?* RQ-4: *How do EFL elementary school students' attitudes toward English lessons and L2 self-confidence qualitatively change through the PBA?*

Chapter Three described the outline of the participants including the results of each preliminary

survey, the material and instructions of the Project-Based Curriculum (the PBC) designed on the basis of the PBA, and the ways to collect and analyze both quantitative and qualitative data. The participants of the current study were fifth and sixth graders who were learning EFL in one public elementary school in the city of Kodaira, a suburb of Tokyo (School A) in the academic years of 2012, 2013, 2014, and 2015. Actually, the effects of the PBA on more than 480 students of School A in total for four years were investigated to respond to the four RQs. To collect the quantitative data, three kinds of instruments, which were listening tests (LTs), assessments of speaking performance during the presentation based on the rubric (ASPs), and questionnaires for self-assessment of self-confidence (QSSs), were developed. To collect the qualitative data, two kinds of open-ended questionnaires, which means students' open-ended questionnaires (SOQs) and HRTs' open-ended questionnaires (HOQs), and the researcher's observation journal (ROJ) were used. The process of data collection for four years was based on the concurrent embedded design.

Chapter Four reported the results of both quantitative and qualitative data analyses. Firstly, Section 4.1, Quantitative Data, presented the numerical and objective outcomes from the quantitative data of the LTs, ASPs, and QSSs along the individual research questions (RQ-1 to RQ-3). Secondly, Section 4.2, Qualitative Data, provided a detailed descriptive analysis of the qualitative data of the SOQs and HOQs through the code matrixes respectively and the information obtained from ROJ. The results from SOQs were used to respond to RQ-4 and those from HOQs and ROJ were used complementarily in order to answer the four RQs from various aspects.

Chapter Five discussed the results by responding to the four RQs raised. First, RQ-1 was answered positively because the results of all the LTs analyzed by *t*-test showed significant differences before and after each project, taking account of the possibility of input from outside the classroom. Second, RQ-2 was also answered positively based on the results of the two raters' ASPs. The results from the ASPs demonstrated high degrees of the students' speaking performance achievement and adequate inter-rater reliability. Third, RQ-3 was answered positively based on the results of the first and the second halves of the QSSs through quantitative analysis by Univariate ANOVA or *t*-test after

factor analysis. That is to say, all of the results of the first half of the QSSs for the students' stable L2 self-confidence showed significant differences, and all of the other data analyses of the second half of the QSSs except for one project for the students' state L2 self-confidence resulted in significant differences. Thus, PBA can be interpreted to have enhanced stable and state L2 self-confidence of the participating students. Finally, based on the results obtained from the qualitative data of the SOQs through the three methods of analysis in the code matrix, RQ-4 was answered as follows. EFL elementary school students will increase their L2 self-confidence by a combined effect of the six elements: the development of their English abilities, the enhancement of their collaboration, the facilitation of their self-involvement, the promotion of the appropriate balance between teachers' guidance and students' autonomy, the furtherance of their sense of achievement, and the obtainment of positive feedback from others. Moreover, fostering their attitudes toward English lessons through three aspects of attitudes (i.e., affective, cognitive, and behavioral attitudes), especially affective attitudes for an extended period of time, is crucial for EFL elementary school students.

Chapter Six described four main limitations to be considered: effects of plural teachers, samples of convenience, absence of control groups, and possible influence by the participants' opportunities to learn English outside school. Even though the current study had these limitations, the researcher discussed the results carefully on the basis of the longitudinal and cross-sectional examination, referring to Brown (2014), Creswell (2009), and Muijs (2011).

In addition, the researcher provides some pedagogical implications about how to make the best use of the PBA in 2020, when the new government guidelines (MEXT, 2017) are put into operation. The first suggestion is to incorporate the PBA into the national curriculum. The PBA can be effective for helping fifth and sixth graders learn to read and write as well. In addition, projects based on textbooks can be practical and efficient. The second suggestion is to apply the PBA to English lessons in third and fourth grades via Foreign Language Activities. Moreover, it is important to develop collaboration between students and people who assist English classes, which works in a different way from collaboration between teachers, because it can encourage students to be deeply involved in

studying English.

Chapter Seven concluded the current study. First of all, based on the findings of this study, the effectiveness of the PBA in teaching EFL to Japanese elementary school students has been supported. Accordingly, the PBA can be considered to be one of the appropriate approaches for meeting the main objective set by MEXT (2008). Moreover, the current study illustrated the usefulness of the Project-Based Curriculum (PBC) based on the PBA. As an empirical study of the PBA in an EFL learning context through an in-depth examination of the students' listening abilities, speaking performance, L2 self-confidence, and attitudes toward English lessons from both linguistic and affective perspectives over an extended period of time using the mixed methods approach, the findings of this study support previous research and provide a few suggestions for incorporating the PBA into the new government guidelines (MEXT, 2017). The findings will also afford new insights into EFL and other similar educational contexts as well as Japanese elementary school English education.